REMARKS

Claims 1-24 remain in the application for consideration of the Examiner.

Reconsideration and withdrawal of the outstanding rejections and objections are respectfully requested in light of the following remarks.

The drawings were objected to as failing to comply with 37 CFR 1.84.

By the instant amendment, a proposed drawing correction has been submitted to take into consideration the helpful comments of the Examiner.

Claims 1-6 and 19-25 were rejected under 35 U.S.C. § 102(b) as being anticipated by Choi; and Claims 7-18 were rejected under 35 U.S.C. § 103 as being unpatentable over Choi in view of Confalonieri.

These rejections are respectfully traversed.

It is respectfully submitted that Choi does not disclose or suggest the presently claimed invention including the additional capacitor to facilitate reduction of a positive full scale voltage and thus reduce the operating range of the CDAC circuit to control gain as defined in independent Claims 1 and 10, albeit defined as the method step of sampling with an additional capacitor to increase the amount of charge sampling thereby decreasing the level of the input signal necessary to achieve full charge levels and decreasing the range of CDAC circuit in independent Claim 19. Albeit defined as an additional capacitor to decrease the level of the input signal necessary to achieve full charge levels and thereby reduce a high end of the range less than a reference voltage in independent Claim 23.

The Examiner alleges that Choi discloses an additional capacitor C_0 having one side configured for coupling to a pedestal voltage and another side configured to coupling to the input voltage during sampling.

With respect to C_0 , Choi discloses at column 7, lines 24-30 that C_0 is connected to inverting input terminal of the operational amplifier 220 as shown in Figure 7 and connected to feedback line 3.

Furthermore, Choi relates to a multiplying digital-to-analog converter and not a CDAC.

Confalonieri does not cure the above noted defects.

The Examiner alleges that the output of comparator 20 is to facilitate the correction of gain amplifiers. However, this does not meet the deficiencies set forth above.

In light of the above, it is respectfully submitted that the present application is in condition for allowance, and notice to that effect is respectfully requested.

While it is believed that the instant response places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

To the extent necessary, Applicant petitions for an Extension of Time under 37 CFR 1.136. Please charge any fees in connection with the filing of this paper, including extension of time fees, to the deposit account of Texas Instruments Incorporated, Account No. 20-0668.

Respectfully submitted,

W. Danie Swayze, Jr. Attorney for Applicant Reg. No. 34,478

Texas Instruments Incorporated P.O. Box 655474, MS 3999 Dallas, TX 75265 (972) 917-5633